

CREDIT OPINION

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Vermont (State of)

Update to credit analysis

Summary

The [State of Vermont](#) (Aa1 stable) has the smallest US state economy, as measured by gross domestic product and the second smallest population. The potential for the state's slowly growing population to drive slower than average economic growth is a factor in the state's current rating. This has been illustrated over the past decade and more as Vermont's performance on several economic indicators trailed the US. The state realized gains in its prime-working age population over the last couple years, likely a result of remote workers choosing to relocate to Vermont. If sustained, this has the potential to boost economic growth in the coming years.

The state's strong credit quality remains supported by stable and healthy finances, and strong governance. Despite slower economic growth, Vermont's revenue continues to grow and the state maintains solid fund balances and liquidity. The state's prudent fiscal management has contributed to rising reserves and the state recently implemented legislation aimed at reducing long-term pension and other post employment benefits liabilities. Further, other economic indicators are healthy, such as above average personal income, high educational attainment and low unemployment.

Vermont's long-term liabilities ratio exceeds state medians, and the state's long-term liabilities consist mostly of unfunded pension and OPEB liabilities. Despite being higher than those of most states, Vermont's liabilities ratio is well below the ratio of the most heavily burdened states. As a US state, Vermont has broad flexibility to adjust its finances in response to operating challenges and the recently enacted pension and OPEB legislation could bring those liabilities down in coming years.

Exhibit 1

Overview of Vermont's debt and bond ratings

As of fiscal year end 2022

Type of debt	Principal outstanding (\$m)	Moody's rating
General obligation	\$629	Aa1
Special tax - property transfer tax	\$30	Aa2
Appropriation - mental health	\$19	A1
Leases	\$84	N/A

Principal includes bond premium

Source: Vermont's audited financial statements and Moody's Investors Service

Credit strengths

- » Although Vermont's economy is the smallest of all US states, resident income is above average, educational attainment is high and unemployment is low
- » Financial operations and budget reserves are sound and stable, and liquidity is very healthy

Credit challenges

- » The state's economic performance lags that of the US and many state peers, and an aging population may be a drag on future growth
- » Relative to state revenue, Vermont's leverage (combined debt and unfunded post-employment liabilities) is higher than most states

Rating outlook

The stable outlook reflects the expectation that Vermont's economic fundamentals, financial position and fiscal management will remain strong and support the current rating.

Factors that could lead to an upgrade

- » Improved demographic and economic trends that more closely track those of the nation and other highly rated states
- » Moderated leverage, especially unfunded pensions and retiree healthcare liabilities, relative to state revenue

Factors that could lead to a downgrade

- » Substantial growth in debt or unfunded post-employment liabilities
- » A slowdown in economic expansion or revenue growth
- » A departure from strong fiscal management practices

Key indicators

Exhibit 2

	2020	2021	2022	State Medians
Economy				
Nominal GDP (\$billions)	34.0	37.1	40.6	264.2
Real GDP, annual growth	-2.9%	5.1%	2.8%	5.5%
RPP-adjusted per capita income as % of US	97%	97.6%		96.6%
Nonfarm employment, annual growth	-9%	2.7%	3.0%	2.7%
Financial performance				
Available balance as % of own-source revenue	14.3%	24.5%	29.3%	27.2%
Net unrestricted cash as % of own-source revenue	48.1%	38.2%	57.2%	63.0%
Leverage				
Total long-term liabilities as % of own-source revenue	228%	251.0%	225.2%	155.0%
Adjusted fixed costs as % of own-source revenue	8.2%	10.4%	7.9%	6.6%

Source: Audited financial statements, Moody's Investors Service, US Bureau of Economic Analysis and US Bureau of Labor Statistic

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody.com> for the most updated credit rating action information and rating history.

Profile

The State of Vermont is located in the northeast US. Its population of just under 650,000 is the second lowest in the country. It has the smallest economy among US states, as measured by a gross domestic product of about \$38 billion.

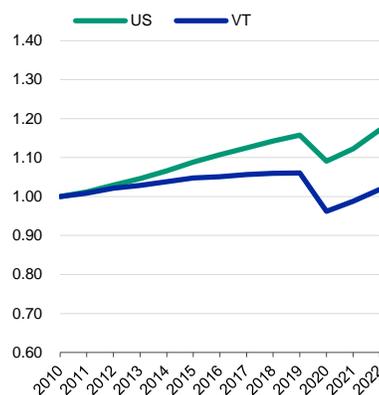
Detailed credit considerations

Economy

Vermont's economy has for many years grown at a slower pace than the US. This is linked to the state's aging and slowly growing population, which itself is a driver of our S-2 assessment of Vermont's social risks. The state saw a jump in jobs in 2022, but year-end employment was still only 96% of the state's pre-pandemic level. Over 2020 and 2021, Vermont's prime working age population grew for the first time in over a decade, a likely result of the state being a draw for remote workers. It remains to be seen how sustainable this trend will be. At the same time, the improvement in the state's population trend over the past couple years has driven a sharp increase in demand for housing. Housing prices are rising in the state and homeowner and rental vacancy rates are among the lowest in the US. The state recently enacted Act 47 in an effort to diminish existing barriers to new housing construction.

Exhibit 3

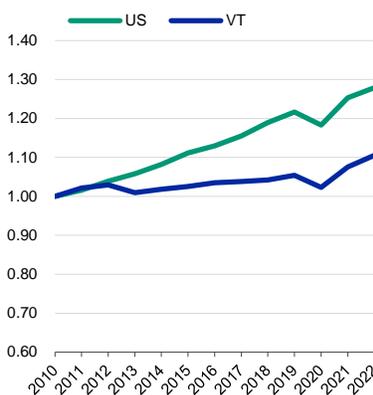
Annual nonfarm employment relative to 2010



Source: US Bureau of Labor Statistics

Exhibit 4

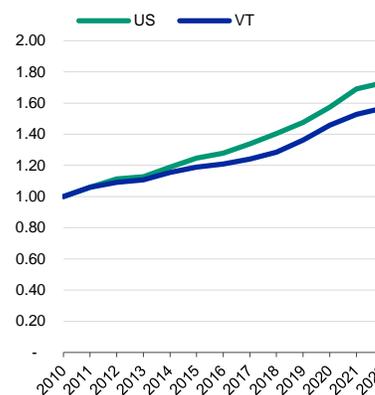
Annual real GDP relative to 2010



Source: US Bureau of Economic Analysis

Exhibit 5

Annual total personal income relative to 2010



Source: US Bureau of Economic Analysis

Vermont's natural beauty and outdoor recreational opportunities make it a popular destination for tourists, and the state's tourism industry is a major economic driver. Vermont ranks third (behind only Hawaii and Nevada) among US States in terms of tourism as a share of state GDP. After taking a hit in most of 2020 and 2021, the state's tourism industry strongly rebounded, as indicated by receipts of state meals and room taxes. After falling 22% over 2020 and 2021, fiscal year 2022 meals and room tax revenue was up 50% and rose a further 9% in fiscal 2023.

Vermont's greatest physical climate risk remains intense rainfall and flooding. We expect the state and most of its local governments have the resources and capacity to address flood events, as shown by the recovery that is currently underway in the wake of very heavy rainfall in mid-July. This recovery is evidence of the state's capacity, through its partnership with the federal government, to respond to flood damages without a material impact on credit.

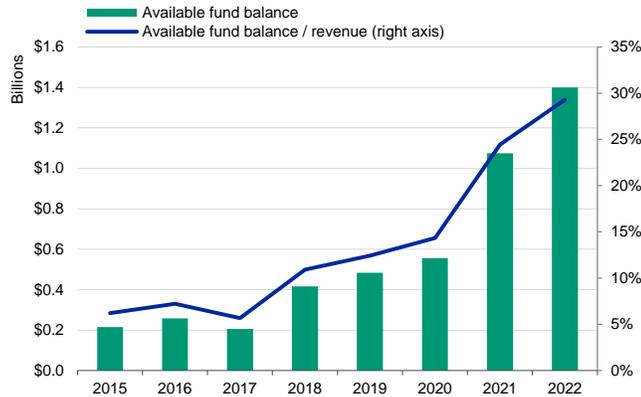
Finances

Vermont's financial performance remains strong. Available fund balance has continued to rise over the past several years and we expect it to remain stable (see Exhibit 6). A portion of the state's audited fund balance consists of its statutory budget reserves, which are held across its three main operating funds - general, transportation and education funds. The state's fiscal 2023 budget included some one-time spending of surplus reserves, but maintained all statutory reserves at required levels. Reserves are similarly maintained in the state's current fiscal 2024 budget.

Fiscal 2023 (closed on June 30, 2023) tax revenue in the state's three main funds was up about 5% over last year. Vermont relies most heavily on personal income and sales taxes (see Exhibit 7). The state also accounts for school district property taxes in its financial

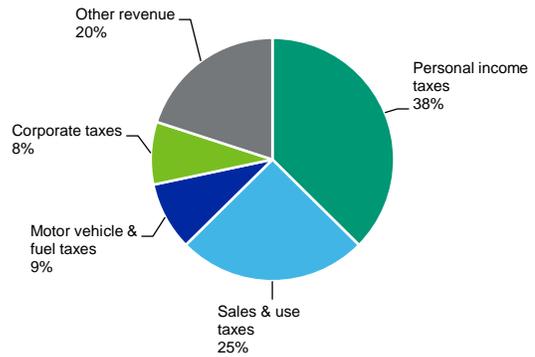
statements because the taxes are pooled in the state's education fund. However, the property taxes are restricted for education and levied, per statute, as an education tax. The state cannot use the property taxes to cover state spending other than education.

Exhibit 6
Vermont's trend in available fund balance
 fiscal year ending June 30



Source: Vermont's audited financial statements and Moody's Investors Service

Exhibit 7
Composition of fiscal 2013 revenue



Source: State of Vermont

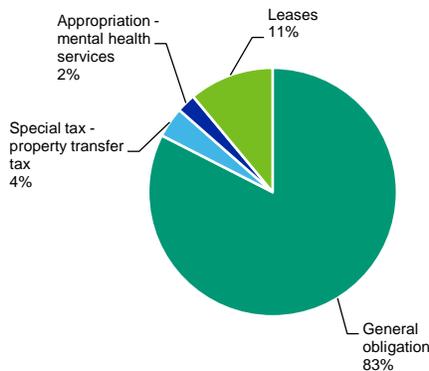
Liquidity

Across government activities, Vermont's cash balances also remain healthy (see Exhibit 2 above). Monthly cash reports released by the state indicate further improvement in overall liquidity at the close of fiscal 2023.

Leverage

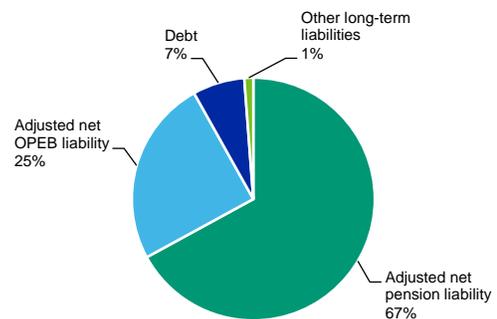
Vermont's debt burden will remain moderate, but the state will continue to carry a heavier post-employment liability burden. Vermont's debt primarily consists of general obligation bonds (see Exhibit 8) and its debt ratios are very close to the state medians. Vermont's post-employment liability burden, measured by the combination of our adjusted net pension liability and adjusted net OPEB liability, is the principal component of its leverage (see Exhibit 9), and contributes to a total long-term liability burden that exceeds the state median. Vermont's pension and OPEB burdens incorporate all liabilities associated with statewide school districts because the state accounts for all primary and secondary education financial activities in its own financial statements. Despite this broad inclusion of liabilities, Vermont's total long-term liability burden remains much lower than those of the most highly leveraged states.

Exhibit 8
Composition of Vermont's debt
 as of fiscal year end 2022



Source: Vermont's audited financial statements

Exhibit 9
Composition of Vermont's total long-term liabilities
 as of fiscal year end 2022



Source: Vermont's audited financial statement and Moody's Investors Service

Legal security

Exhibit 1 above details the different types of bonds outstanding that we consider to be direct debt of Vermont. Exhibit 10 below details the legal security associated with each type of bond.

Exhibit 10

Legal security of Vermont's debt

Type of debt	Legal security
General obligation	Full faith and credit obligation of the state backed by the state's authority to levy taxes without limitation as to rate or amount.
Special tax - property transfer tax	Statutory transfer of the first \$2.5 million of property transfer tax receipts from the state to the Vermont Housing Finance Agency (HFA). Act 85 of 2017 specifically allocates the first \$2.5 million of collections to the HFA to pay debt service on the authorized bonds. The bonds have been issued by the HFA.
Appropriation - mental health services	Payments appropriated by the state to providers of developmental disability services; the bonds have been issued by the Vermont Economic Development Authority and Vermont Educational and Health Buildings Finance Agency.
Vermont State Aid Intercept Program	The legal security for the state aid intercept program is a state law, Act 77, that requires the treasurer to intercept funds payable to an issuer that has defaulted on a loan payment to the Vermont Municipal Bond Bank.

Source: State of Vermont

Debt structure

All of Vermont's debt is fixed rate.

Debt-related derivatives

Vermont is not party to any debt-related derivatives.

Pensions and OPEB

Across both of its retirement plans (the Vermont State Retirement System and State Teachers' Retirement System), Vermont's pension contribution was \$507 million in fiscal 2022. This contribution was more than double the \$225 million we calculate as the state's aggregate pension "tread water" indicator (see details below on planned lump sum contributions). In recent years, Vermont's pension contributions have approximated or exceeded annual "tread water" indicators, which is the contribution necessary to forestall growth in reported net liabilities assuming realization of actuarial assumptions. The "tread water" indicator is the pension-related component of the fixed cost burden reported in Exhibit 2 above.

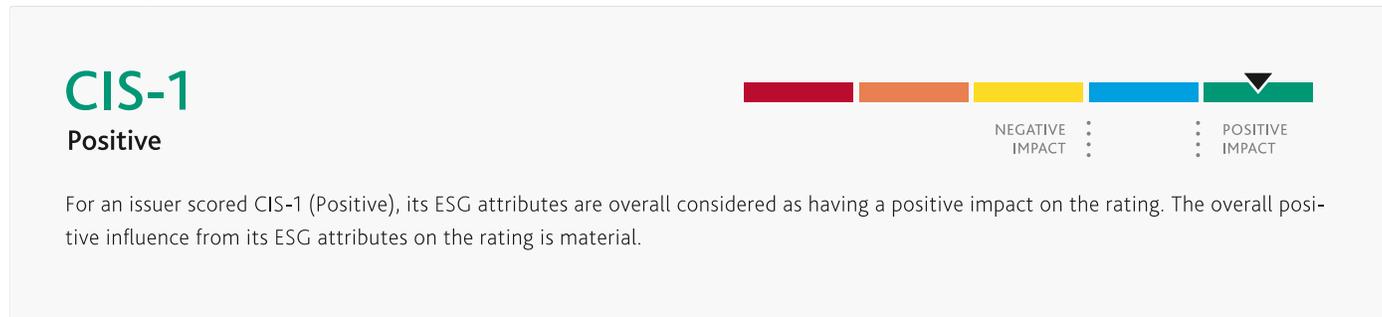
In May 2022, the Vermont legislature enacted numerous changes to pension and OPEB benefits and funding. The state will make large, lump sum contributions to its retirement plans and will also require active employees to gradually increase their own contributions. Further, the legislation implements a host of benefit formula changes and extends the amount of time that many retirees must wait to begin receiving pension cost-of-living adjustments. All of these measures will have a positive impact on the state's long-term pension liabilities. The May legislation also commits the state to greater prefunding of other post-employment benefits, which over time will also lower the state's net OPEB liabilities. For more details on this legislation, please see [this report](#).

ESG considerations

Vermont (State of)'s ESG Credit Impact Score is Positive CIS-1

Exhibit 11

ESG Credit Impact Score



Source: Moody's Investors Service

Vermont's ESG Credit Impact Score is positive (**CIS-1**), reflecting neutral to low exposures to environmental and social risks and a positive governance profile.

Exhibit 12

ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

Vermont's E issuer profile score is neutral-to-low (**E-2**). Among US states, Vermont's environmental risks are low. With no coastal exposure, Vermont local governments are primarily exposed to extreme rainfall risk, according to data from Moody's ESG Solutions. Increased rainfall could result in more frequent local or regional flooding. We expect the state and most of its local governments have the resources and capacity to address flood events.

Social

Vermont's S issuer profile score is neutral-to-low (**S-2**). Vermont has one of the slowest growing populations in the US and the most rapid decline in prime working age population (residents aged 25-54). Despite the small growth in this population over the past couple years, since 2000 the state's prime working age population fell just over 14% and it has fallen nearly 7% since 2010. These are the highest rates of decline over these two periods among the 50 states and the District of Columbia.

Support for health services by the federal government, mainly through Medicaid grants, represents a vulnerability for states and Vermont is no exception. According to data of the federal government, approximately 27% of Vermont residents are currently enrolled in Medicaid and the Children's Health Insurance Program (CHIP), a ratio higher than the 24% of the national population enrolled. This indicates that Vermont is a bit more vulnerable to a change in federal policy or funding than other states. Statewide, housing affordability has not fallen as much in Vermont as it has in many parts of the US. Though slow population growth could be a drag on future economic growth, it could keep housing affordable in most parts of the state.

Governance

Vermont's governance is strong, reflected in its positive G issuer profile score (**G-1**). The state updates its consensus revenue forecast twice per year, in January and July. The January update covers the remainder of the current fiscal year as well as the two upcoming fiscal years. The July update then revises the forecast for the newly begun fiscal year and the immediately following fiscal year. The two forecast updates are required by statute. During economic downturns, such as the 2007-09 recession, the state has updated its revenue forecast more frequently to aid responses to weakened revenue performance.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Rating methodology and scorecard factors

The US States and Territories Rating Methodology includes a scorecard, which summarizes the rating factors generally most important to state and territory credit profiles. Because the scorecard is a summary, and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not map closely to the actual rating assigned.

Exhibit 13

Vermont (State of)

	Measure	Weight	Score
Economy			
Resident Income (PCI Adjusted for RPP / US PCI)	97.6%	15%	Aa
Economic Growth (5-year CAGR real GDP - 5-year CAGR US real GDP)	-0.8%	15%	Aa
Financial performance			
Financial performance	Aaa	20%	Aaa
Governance/Institutional Framework			
Governance/Institutional Framework	Aaa	20%	Aaa
Leverage			
Long-term liabilities ratio (adjusted long-term liabilities / own-source re	225.2%	20%	A
Fixed-costs ratio (adjusted fixed costs / own-source revenue)	7.9%	10%	Aaa
Notching factors			
Very limited and concentrated economy	-		
Scorecard-Indicated Outcome			Aa1
Assigned rating			Aa1

Source: Audited financial statements, Moody's Investors Service and US Bureau of Economic Analysis

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